
Sequence Listing was accepted.

If you need help call the Patent Electronic Business Center at (866)

217-9197 (toll free).

Reviewer: markspencer

Timestamp: Tue Jun 19 13:17:19 EDT 2007

Validated By CRFValidator v 1.0.2

Application No: 10817530 Version No: 3.0

Input Set:

Output Set:

Started: 2007-06-18 14:39:02.377

Finished: 2007-06-18 14:39:02.789

Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 412 ms

Total Warnings: 5

Total Errors: 0

No. of SeqIDs Defined: 17

Actual SeqID Count: 17

Error code		Error Description											
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(1)		
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(2)		
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(3)		
W	213	Artificial	or	Unknown	found	in	<213>	in	SEQ	ID	(4)		
W	213	Artificial	or	Unknown	found	in	<213>	in	SEO	ID	(5)		

```
<110> Braun, Werner
      Mathura, Venkatarajan S.
      Schein, Catherine H.
<120> PHYSICAL-CHEMICAL PROPERTY BASED SEQUENCE MOTIFS AND METHODS
      REGARDING SAME
<130> 265.00400101
<140> 10817530
<141> 2004-04-02
<150> 10/817,530
<151> 2004-04-02
<150> US 60/460,769
<151> 2003-04-04
<160> 17
<170> PatentIn version 3.3
<210> 1
<211> 10
<212> PRT
<213> ARTIFICIAL SEQUENCE
<220>
<223> MEMBER OF DNase-I SUPERFAMILY
<400> 1
Pro Asp Ile Leu Cys Leu Gln Glu Thr Lys
             5
<210> 2
<211> 275
<212> PRT
<213> ARTIFICIAL SEQUENCE
<220>
<223> MEMBER OF DNase-I SUPERFAMILY
<400> 2
Leu Tyr Glu Asp Pro Pro Asp Gln Lys Thr Ser Pro Ser Gly Lys Pro
                                 10
Ala Thr Leu Lys Ile Cys Ser Trp Asn Val Asp Gly Leu Arg Ala Trp
          20
                            25
                                                 30
```

Ile Lys Lys Gly Leu Asp Trp Val Lys Glu Glu Ala Pro Asp Ile

35 40 45

Leu Cys Leu Gln Glu Thr Lys Cys Ser Glu Asn Lys Leu Pro Ala Glu 50 55 60

Leu Gln Glu Leu Pro Gly Leu Ser His Gln Tyr Trp Ser Ala Pro Ser 65 70 75 80

Asp Lys Glu Gly Tyr Ser Gly Val Gly Leu Leu Ser Arg Gln Cys Pro 85 90 95

Leu Lys Val Ser Tyr Gly Ile Gly Asp Glu Glu His Asp Gln Glu Gly
100 105 110

Arg Val Ile Val Ala Glu Phe Asp Ser Phe Val Leu Val Thr Ala Tyr 115 120 125

Val Pro Asn Ala Gly Arg Gly Leu Val Arg Leu Glu Tyr Arg Gln Arg 130 135 140

Pro Leu Val Leu Cys Gly Asp Leu Asn Val Ala His Glu Glu Ile Asp $165 \hspace{1.5cm} 170 \hspace{1.5cm} 175$

Leu Arg Asn Pro Lys Gly Asn Lys Lys Asn Ala Gly Phe Thr Pro Gln
180 185 190

Glu Arg Gln Gly Phe Gly Glu Leu Leu Gln Ala Val Pro Leu Ala Asp 195 200 205

Ser Phe Arg His Leu Tyr Pro Asn Thr Pro Tyr Ala Tyr Thr Phe Trp 210 215 220

Thr Tyr Met Met Asn Ala Arg Ser Lys Asn Val Gly Trp Arg Leu Asp 225 230 235 235

Tyr Phe Leu Leu Ser His Ser Leu Leu Pro Ala Leu Cys Asp Ser Lys 245 250 255

Ile Arg Ser Lys Ala Leu Gly Ser Asp His Cys Pro Ile Thr Leu Tyr 260 265 270

```
Leu Ala Leu
     275
<210> 3
<211> 268
<212> PRT
<213> ARTIFICIAL SEQUENCE
<220>
<223> MEMBER OF DNase-I SUPERFAMILY
<400> 3
Met Lys Phe Val Ser Phe Asn Ile Asn Gly Leu Arg Ala Arg Pro His
               10 15
Gln Leu Glu Ala Ile Val Glu Lys His Gln Pro Asp Val Ile Gly Leu
                25
         20
                                       30
Gln Glu Thr Lys Val His Asp Asp Met Phe Pro Leu Glu Glu Val Ala
     35 40 45
Lys Leu Gly Tyr Asn Val Phe Tyr His Gly Gln Lys Gly His Tyr Gly
                  55
Val Ala Leu Leu Thr Lys Glu Thr Pro Ile Ala Val Arg Arg Gly Phe
65
         70 75
Pro Gly Asp Asp Glu Glu Ala Gln Arg Arg Ile Ile Met Ala Glu Ile
          85
                  90
Pro Ser Leu Leu Gly Asn Val Thr Val Ile Asn Gly Tyr Phe Pro Gln
                   105
        100
                                      110
Gly Glu Ser Arg Asp His Pro Ile Lys Phe Pro Ala Lys Ala Gln Phe
    115 120 125
Tyr Gln Asn Leu Gln Asn Tyr Leu Glu Thr Glu Leu Lys Arg Asp Asn
         135
  130
                                 140
```

Ile Gly Ile Gly Glu Glu Asn Arg Lys Arg Trp Leu Arg Thr Gly Lys

Pro Val Leu Ile Met Gly Asp Met Asn Ile Ser Pro Thr Asp Leu Asp 145 150 155

160

165 170 175

Cys Ser Phe Leu Pro Glu Glu Arg Glu Trp Met Asp Arg Leu Met Ser 180 185 190

Trp Gly Leu Val Asp Thr Phe Arg His Ala Asn Pro Gln Thr Ala Asp 195 200 205

Arg Phe Ser Trp Phe Asp Tyr Arg Ser Lys Gly Phe Asp Asp Asn Arg 210 215 220

Gly Leu Arg Ile Asp Leu Leu Leu Ala Ser Gln Pro Leu Ala Glu Cys 225 230 235 240

Cys Val Glu Thr Gly Ile Asp Tyr Glu Ile Arg Ser Met Glu Lys Pro 245 250 255

Ser Asp His Ala Pro Val Trp Ala Thr Phe Arg Arg 260 265

<210> 4

<211> 258

<212> PRT

<213> ARTIFICIAL SEQUENCE

<220>

<223> MEMBER OF DNase-I SUPERFAMILY

<400> 4

Leu Lys Ile Ala Ala Phe Asn Ile Arg Thr Phe Gly Glu Thr Lys Met 1 5 10 15

Ser Asn Ala Thr Leu Ala Ser Tyr Ile Val Arg Ile Val Arg Tyr 20 25 30

Asp Ile Val Leu Ile Gln Glu Val Arg Asp Ser His Leu Val Ala Val 35 40 45

Gly Lys Leu Leu Asp Tyr Leu Asn Gln Asp Asp Pro Asn Thr Tyr His
50 55 60

Tyr Val Val Ser Glu Pro Leu Gly Arg Asn Ser Tyr Lys Glu Arg Tyr 65 70 75 80

Leu Phe Leu Phe Arg Pro Asn Lys Val Ser Val Leu Asp Thr Tyr Gln 85 90 95 Tyr Asp Asp Gly Cys Cys Gly Asn Asp Ser Phe Ser Arg Glu Pro Ala 100 105 110 Val Val Lys Phe Ser Ser His Ser Thr Lys Val Lys Glu Phe Ala Ile 115 120 Val Ala Leu His Ser Ala Pro Ser Asp Ala Val Ala Glu Ile Asn Ser 135 140 Leu Tyr Asp Val Tyr Leu Asp Val Gln Gln Lys Trp His Leu Asn Asp 145 150 155 160 Val Met Leu Met Gly Asp Phe Asn Ala Asp Cys Ser Tyr Val Thr Ser 175 165 170 Ser Gln Trp Ser Ser Ile Arg Leu Arg Thr Ser Ser Thr Phe Gln Trp 180 185 190 Leu Ile Pro Asp Ser Ala Asp Thr Thr Ala Thr Ser Thr Asn Cys Ala 195 200 Tyr Asp Arg Ile Val Val Ala Gly Ser Leu Leu Gln Ser Ser Val Val 210 215 220 Pro Gly Ser Ala Ala Pro Phe Asp Phe Gln Ala Ala Tyr Gly Leu Ser 230 235 240 225 Asn Glu Met Ala Leu Ala Ile Ser Asp His Tyr Pro Val Glu Val Thr 250 245 255 Leu Thr <210> 5 <211> 336 <212> PRT <213> ARTIFICIAL SEQUENCE

<400> 5

<223> MEMBER OF DNase-I SUPERFAMILY

<220>

Tyr As	p Pro	Ile	His 5	Glu	Tyr	Val	Asn	His 10	Glu	Leu	Arg	Lys	Arg 15	Glu
Asn Gl	u Phe	Ser 20	Glu	His	Lys	Asn	Val 25	Lys	Ile	Phe	Val	Ala 30	Ser	Tyr
Asn Le	u Asn 35	Gly	Cys	Ser	Ala	Thr 40	Thr	Lys	Leu	Glu	Asn 45	Trp	Leu	Phe
Pro Gl 50		Thr	Pro	Leu	Ala 55	Asp	Ile	Tyr	Val	Val 60	Gly	Phe	Gln	Glu
Ile Va	l Gln	Leu	Thr	Ser 70	Ala	Asp	Pro	Ala	Lys 75	Arg	Arg	Glu	Trp	Glu 80
Ser Cy	s Val	Lys	Arg 85	Leu	Leu	Asn	Gly	Lys 90	Суз	Thr	Ser	Gly	Pro 95	Gly
Tyr Va	l Gln	Leu 100	Arg	Ser	Gly	Gln	Leu 105	Val	Gly	Thr	Ala	Leu 110	Met	Ile
Phe Cy	s Lys 115		Ser	Суз	Leu	Pro 120	Ser	Ile	Lys	Asn	Val 125	Glu	Gly	Thr
Val Ly	_	Thr	Gly	Leu	Gly 135	Asn	Lys	Gly	Ala	Val 140	Ala	Ile	Arg	Phe
Asp Ty 145	r Glu	Asp	Thr	Gly 150	Leu	Cys	Phe	Ile	Thr 155	Ser	His	Leu	Ala	Ala 160
Gly Ty	r Thr	Asn	Tyr 165	Asp	Glu	Arg	Asp	His 170	Asp	Tyr	Arg	Thr	Ile 175	Ala
Ser Gl	y Leu	Arg 180	Phe	Arg	Arg	Gly	Arg 185	Ser	Ile	Phe	Asn	His 190	Asp	Tyr
Val Va	.1 Trp 195		Gly	Asp	Phe	Asn 200	Tyr	Arg	Ile	Ser	Leu 205	Thr	Tyr	Glu
Glu Va		Pro	Суз	Ile	Ala 215	Gln	Gly	Lys	Leu	Ser 220	Tyr	Leu	Phe	Glu

Tyr Asp Gln Leu Asn Lys Gln Met Leu Thr Gly Lys Val Phe Pro Phe 225 230 235 240 Phe Ser Glu Leu Pro Ile Thr Phe Pro Pro Thr Tyr Lys Phe Asp Ile 245 250 255 Gly Thr Asp Ile Tyr Asp Thr Ser Asp Lys His Arg Val Pro Ala Trp 260 265 270 Thr Asp Arg Ile Leu Tyr Arg Gly Glu Leu Val Pro His Ser Tyr Gln 280 Ser Val Pro Leu Tyr Tyr Ser Asp His Arg Pro Ile Tyr Ala Thr Tyr 290 295 300 Glu Ala Asn Ile Val Lys Val Asp Arg Glu Lys Lys Lys Ile Leu Phe 315 305 310 Glu Glu Leu Tyr Asn Gln Arg Lys Gln Glu Val Arg Asp Ala Ser Gln 325 330 335 <210> 6 <211> 13 <212> PRT <213> HOMO SAPIENS <400> 6 Leu Lys Ile Cys Ser Trp Asn Val Asp Gly Leu Arg Ala 5 10 <210> 7 <211> 10 <212> PRT <213> HOMO SAPIENS <400> 7 Pro Asp Ile Leu Cys Leu Gln Glu Thr Lys 1 5 <210> 8 <211> 15 <212> PRT <213> HOMO SAPIENS

<400> 8

```
Lys Glu Gly Tyr Ser Gly Val Gly Leu Leu Ser Arg Gln Cys Pro
                               10
<210> 9
<211> 23
<212> PRT
<213> HOMO SAPIENS
<400> 9
Gly Ile Gly Asp Glu Glu His Asp Gln Glu Gly Arg Val Ile Val Ala
Glu Phe Asp Ser Phe Val Leu
       20
<210> 10
<211> 5
<212> PRT
<213> HOMO SAPIENS
<400> 10
Tyr Val Pro Asn Ala
<210> 11
<211> 8
<212> PRT
<213> HOMO SAPIENS
<400> 11
Arg Leu Glu Tyr Arg Gln Arg Trp
<210> 12
<211> 12
<212> PRT
<213> HOMO SAPIENS
<400> 12
Pro Leu Val Leu Cys Gly Asp Leu Asn Val Ala His
<210> 13
<211> 13
<212> PRT
```

<213> HOMO SAPIENS

```
Gly Phe Thr Pro Gln Glu Arg Gln Gly Phe Gly Glu Leu
<210> 14
<211> 8
<212> PRT
<213> HOMO SAPIENS
<400> 14
Val Pro Leu Ala Asp Ser Phe Arg
<210> 15
<211> 7
<212> PRT
<213> HOMO SAPIENS
<400> 15
Tyr Thr Phe Trp Thr Tyr Met
   5
<210> 16
<211> 18
<212> PRT
<213> HOMO SAPIENS
<400> 16
Arg Ser Lys Asn Val Gly Trp Arg Leu Asp Tyr Phe Leu Leu Ser His
                                 10
Ser Leu
<210> 17
<211> 7
<212> PRT
<213> HOMO SAPIENS
<400> 17
Gly Ser Asp His Cys Pro Ile
```

<400> 13